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(54) **MICROSTRIP PATCH ANTENNA WITH PROGRESSIVE SLOT LOADING**

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(57) **ABSTRACT**

A microstrip patch antenna with progressive slot loading is provided. A rectangular patch of electrically conductive material has a plurality of slots formed therein with each slot having its center aligned with the centerline of the patch's long dimension. Each slot further has its longitudinal axis perpendicular to the centerline. The slots are arranged in an order starting at a position n=1 that is furthest from the patch's feedpoint so that, for an n-th slot, the inequalities $L_n > L_{n+1}$ and $W_n < W_{n+1}$ are always satisfied. In general, the length decreases linearly with each successive slot while the width increases exponentially with each successive slot.

11 Claims, 1 Drawing Sheet